

CLAIM OR CLAIMS

I/WE CLAIM:

1. A method for the diagnosis of diabetes in an individual comprising the step of determining the expression pattern in the adipose tissue of the individual of any of the genes listed in Tables 1, 2 and 3 to determine if the individual has diabetic disease.

2. A method as claimed in claim 1 wherein the gene is SREBP.

3. A method for the diagnosis of diabetes in an individual comprising the step of determining the expression pattern in the adipose tissue of the individual of a subset of the genes listed in Tables 1, 2 and 3, that subset being determinative of diabetic disease.

4. A method for the diagnosis of diabetes in an individual comprising the step of determining the expression pattern in the adipose tissue of the individual of at least four genes, the four genes selected from at least four of the gene groupings listed on Table 1 or Table 2.

5. A method for the diagnosis of diabetes in an individual comprising the steps of taking a sample of adipose tissue from the individual; and

determining the expression pattern of a gene in the adipose tissue of the individual to determine if the individual has diabetic disease or a genetic predisposition to diabetic disease.

6. A method for the diagnosis of diabetes in an individual comprising the step of determining the expression pattern in the adipose tissue of the individual of at least four of the genes listed in Tables 1 and 2, those genes being determinative as to whether the individual has diabetic disease.

7. A method as claimed in claim 4 wherein the genes are selected from at least four of the gene groupings in the group consisting of hormone and signal transduction genes, mitochondrial genes, lipid metabolism genes, transcription factor genes, secreted protein genes, cytoskeletal genes, lysosomal genes, immune/complement genes, cell proliferation genes, adipose-specific genes, and membrane protein genes.

8. A method for the diagnosis of susceptibility of an individual to diabetes comprising assaying the expression level of the gene SREBP in the adipose tissue of the individual.

9. A method for the diagnosis of the development of insulin resistance comprising the steps of

determining the expression patterns in adipose tissue of the individual of the genes listed in Table 3 to determine if the individual has developed insulin resistance.

10. A method for the diagnosis of insulin resistance in an individual comprising the step of determining the expression pattern in the adipose tissue of the individual of at least four of the genes listed in Table 3, those genes being determinative as to whether the individual has developed insulin resistance.

11. A method for the diagnosis or prognosis of obesity, incipient obesity, or the transition from obese to diabetec, in an individual, comprising the step of

determining the expression pattern in the adipose tissue of the individual of any of the genes listed in Tables 1, 2 and 3 to determine if the individual has gene expression consistent with said diagnosis or prognosis.